

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A production control system for producing products from parts, the production control system[[,]] comprising:

a product data obtaining module configured to obtain product data including an effective surplus production quantity from a parent product production location, which is a location producing parent products using the products as ~~their~~ direct parts;

a part data obtaining module configured to obtain part data including a surplus production quantity from a part production location producing [[the]] parts;

an effective surplus production quantity calculation module configured to calculate an effective surplus production quantity of a production department which produces the products from the parts based on the effective surplus production quantity and the surplus production quantity;

a part data transmission module configured to transmit the part data including [[an]] the effective surplus production quantity of the production department to the part production location; ~~and,~~

a product data transmission module configured to transmit the product data including a surplus production quantity of ~~their~~ the products to the parent production location;

a product data storage unit configured to retain the product data including a fixed quantity of parent products, a requested quantity of parent products, and a surplus production quantity of parent products;

a part data storage unit configured to retain the part data including a fixed quantity of parts, a desired quantity of parts, and a surplus production quantity of parts; and

a production scheduler configured to update the requested quantity of parent products according to the change of the desired quantity of parts from the parent production location,

update the desired quantity of parts according to the change of the requested quantity of parent products, the fixed quantity of parts and the surplus quantity of parts, update the fixed quantity of parent products and surplus production quantity of parent products according to the change of the requested quantity of parent products, and update the fixed quantity of parts and the surplus production quantity of parts according to the change of the fixed quantity of parent products and surplus production quantity of parent products.

Claims 2-5 (Canceled).

Claim 6 (Currently Amended): A production control system for producing products from parts, the production control system[[,]] comprising:

means ~~for obtaining~~ configured to obtain product data including an effective surplus production quantity from a parent product production location, which is a location producing parent products using the products as their direct parts;

means ~~for obtaining~~ configured to obtain part data including a surplus production quantity from a part production location producing [[the]] parts;

means ~~for calculating~~ configured to calculate an effective surplus production quantity of a production department which produces the products from the parts based on the effective surplus production quantity data and the surplus production quantity;

means ~~for transmitting~~ configured to transmit the part data including [[an]] the effective surplus production quantity of the production department to the part production location; [[and,]]

means ~~for transmitting~~ configured to transmit the product data including [[a]] the surplus production quantity of ~~their~~ the products to the parent production location;

a product data storage unit configured to retain the product data including a fixed quantity of parent products, a requested quantity of parent products, and a surplus production quantity for parent products;

a part data storage unit configured to retain the part data including a fixed quantity of parts, a desired quantity of parts, and a surplus production quantity of parts; and

a production scheduler configured to update the requested quantity of parent products according to the change of the desired quantity of parts from the parent production location, update the desired quantity of parts according to the change of the requested quantity of parent products, the fixed quantity of parts and the surplus quantity of parts, update the fixed quantity of parent products and surplus production quantity for parent products according to the change of the requested quantity of parent products, and update the fixed quantity of parts and the surplus production quantity of parts according to the change of the fixed quantity of parent products and surplus production quantity of parent products.

Claims 7-9 (Canceled).

Claim 10 (Currently Amended): A production control method for producing products from parts, the method comprising:

obtaining product data including an effective surplus production quantity from a parent product production location, which is a location producing parent products using the products as their direct parts;

obtaining part data including a surplus production quantity from a part production location producing the parts;

calculating an effective surplus production quantity of a production department, which produces the products from the parts, based on the effective surplus production quantity data and the surplus production quantity data; [[and,]]

transmitting the part data including [[an]] the effective surplus production quantity of the production department to the part production location;

retaining the product data including a fixed quantity of parent products, a requested quantity of parent products, and a surplus production quantity of parent products;

retaining the part data including a fixed quantity of parts, a desired quantity for parts; and a surplus production quantity of parts;

updating the requested quantity of parent products by the change of the desired quantity of parts;

updating the fixed quantity of parent products and surplus production quantity of parent products according to the change of the requested quantity of parent products; and

updating the fixed quantity of parts and the surplus production quantity of parts according to the change of the fixed quantity for parent products and surplus production quantity of parent products.

Claim 11 (Currently Amended): A production control method for producing products from parts, the method ~~The production control method of claim 10,~~ further comprising:

obtaining product data including an effective surplus production quantity from a parent product production location, which is a location producing parent products using the products as direct parts;

obtaining part data including a surplus production quantity from a part production location producing the parts;

calculating an effective surplus production quantity of a production department, which produces the products from the parts, based on the effective surplus production quantity and the surplus production quantity;

transmitting part data including an effective surplus production quantity of the production department to the part production location;

retaining the product data including a fixed quantity ~~[[for]]~~ of parent products, a requested quantity of parent products, and a surplus production quantity for parent products;

retaining the part data including a fixed quantity of parts, a desired quantity ~~[[for]]~~ of parts, and a surplus production quantity of parts;

updating the requested quantity of parent products ~~[[by]]~~ according to the change of the desired quantity ~~[[for]]~~ of parts;

updating the fixed quantity for parent products and surplus production quantity for parent products according to the change of the requested quantity of parent products; ~~and,~~

updating the fixed quantity of parts and the surplus production quantity of parts according to the change of the fixed quantity for parent products and surplus production quantity ~~[[for]]~~ of parent products; and

calculating an effective surplus production cash flow by adding an accumulation of the effective surplus production marginal profits to a production plan cash flow, which is a cash flow in the case where the products are produced according to a production plan, all the products are sold in each production period and no inventory is kept.

Claim 12 (Currently Amended): The production control method of claim 10, further comprising~~[[:]~~ calculating an effective surplus production quantity for each production period in consideration of a lead time taken to complete the products.

Claim 13 (Currently Amended): The production control method of claim 10, further comprising[[:]] calculating an effective surplus production marginal profit by use of a product of an effective surplus production quantity of the production department for each production period and a marginal profit of the products.

Claim 14 (Currently Amended): The production control method of claim 10, further comprising[[:]] calculating an effective surplus production cash flow by adding an accumulation of the effective surplus production marginal profits to a production plan cash flow, in which ~~is a cash flow in the case where~~ the products are produced according to a production plan, all the products are sold in each production period and no inventory is kept.

Claims 15-22 (Canceled).

Claim 23 (Currently Amended): A production control computer program ~~product to~~ be executed by a computer for producing products from parts, comprising:

instructions ~~configured~~ to obtain product data including an effective surplus production quantity from a parent product production location, which is a location producing parent products using the products as their direct parts;

instructions ~~configured~~ to obtain part data including a surplus production quantity from a part production location producing the parts;

instructions ~~configured~~ to calculate an effective surplus production quantity of a production department which produces the products from the parts based on the effective surplus production quantity data and the surplus production quantity data; [[and,]]

instructions ~~configured~~ to transmit the part data including [[an]] the effective surplus production quantity of the production department to the part production location,

instructions to retain product data including a fixed quantity for parent products, a requested quantity of parent products, and a surplus production quantity for parent products;

instructions to retain part data including a fixed quantity of parts, a desired quantity for parts, and a surplus production quantity of parts;

instructions to update the requested quantity of parent products according to the change of the desired quantity of parts;

instructions to update the fixed quantity for parent products and the surplus production quantity of parent products according to the change of the requested quantity of parent products; and,

instructions to update the fixed quantity of parts and the surplus production quantity of parts according to the change of the fixed quantity for parent products and surplus production quantity for parent products.

Claims 24-26 (Canceled).